## We claim:

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1. A system for determining the efficacy of a sterilization process and communicating that determination to a remote location, the system comprising:

a sterilization sensor comprising an indicator that undergoes an optical change when exposed to an efficacious sterilization process; and

a reader adapted to receive the sterilization sensor, the reader comprising an illumination source for illuminating the sterilization sensor,

a first color sensor for evaluating the condition of the illuminated sterilization sensor,

an interpretation circuit for interpreting the output of the color sensor to determine whether the optical change has taken place, and

a communication circuit for communicating data from the interpretation circuit to the remote location.

- 2. The system according to claim 1 wherein the sterilization sensor is disposable and the reader is reusable.
- 3. The system according to claim 1 further comprising an interrogator for commanding the reader to communicate data from the interpretation circuit.
- 4. The system according to claim 1 further comprising a second color sensor for evaluating the condition of the illuminated sterilization sensor, wherein the interpretation circuit interprets the output of the first color sensor and the second color sensor to determine whether the optical change has taken place.
- 5. The system according to claim 1 wherein the reader has at least one tortuous path adapted for conveying gas to the sterilization sensor.

6. A method of determining the efficacy of the sterilization process, comprising the steps of:

providing a sterilization sensor comprising an indicator that undergoes an optical change when exposed to an efficacious sterilization process;

placing the sterilization sensor within a reader;

placing the reader with the sterilization sensor inside a package of goods;

subjecting the package to sterilizing conditions; and

interrogating the reader without opening the package to learn whether the optical change has taken place.

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7. The method according to claim 6 wherein the reader comprises an illumination source for illuminating the sterilization sensor, a color sensor for evaluating the condition of the illuminated sterilization sensor, an interpretation circuit for interpreting the output of the color sensor to determine whether the optical change has taken place, and

a communication circuit for communicating data from the interpretation circuit to a location outside of the package.

8. The method according to claim 7 wherein the sterilization sensor is disposable and the reader is reusable.